

## Peabody, Daniel (EGLE)

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**From:** Peabody, Daniel (EGLE)  
**Sent:** Wednesday, November 20, 2019 6:25 AM  
**To:** saric.james@epa.gov; Keiser, Jeff/MKE  
**Cc:** Roberts, Keegan; Kirchner, Scott; Miller, Megan (AG); Ruhala, Sydney (EGLE); Bennett, Brian  
**Subject:** EGLE Comments on Area 1 PDIWP Addendum 6  
**Attachments:** EGLE Comments\_Area 1 PDIWP Addendum 6\_BIN Sampling.pdf; EGLE Comments\_Area 1 PDIWP Addendum 6\_BIN Sampling.docx

Jim,

Attached are EGLE's comments on the Area 1 PDIWP – Addendum 6 Bin 1 and Bin 5 Discrete Sampling. Per your previous request I included a Word and PDF copy so that you can easily incorporate EGLE's comments. I did have a few comments that are pretty significant so I included those in the email below. Please let me know if you have any questions.

**Commenting Organization: EGLE**

**Commenter:**

**General Comment #: 1**

If the most-recent version Quality Assurance Project Plan (QAPP) is significantly different than the Draft QAPP then every effort should be made to follow the latest version of the QAPP since EPA disapproved and provided comments on the Draft.

**Commenting Organization: EGLE**

**Commenter:**

**General Comment #: 2**

The Work Plan discusses that upon receipt of results next steps will be discussed with the Agency's during a Work Group Meeting. The document should identify possible outcomes and propose strategies so that the full scope of the sampling plan can be understood. This would allow readers to better understand the sample layout and density that is provided for each of the BINS and create a dialogue amongst the Work Group to determine if the number and location of samples is adequate.

**Commenting Organization: EGLE**

**Commenter:**

**General Comment #: 3**

What is the purpose of changing sample grid density 50-feet from the channel? Rather than picking an arbitrary distance empirical evidence (i.e. aerial photos, HECRAS modeling, etc.) should be considered and used to determine the area that is "more frequently inundated" as discussed in Section 4.1.

**Commenting Organization: EGLE**

**Commenter:**

**Section: 2.5**

**Page #: 2-2**

**Lines #:**

**Specific Comment #3:** Choosing to stop at a pre-determined interval may not lead to full vertical delineation and it may be more useful to use other cues, such as visual indicators, to determine the appropriate intervals to submit and hold for analysis. This approach is also inconsistent with the Conceptual Site Model (CSM) that contaminant transport is based on episodic events, which would typically produce irregular and interbedded deposits. EGLE recommends collecting soils deeper than 3 feet and holding those materials to reduce the likelihood of incomplete delineation and the need for additional mobilization.

**Commenting Organization: EGLE**

**Commenter:**

**Section: 2.5**

**Page #: 2-2**

**Lines #:**

**Specific Comment #4:** The co-location of total PCBs and total TEQ above their respective FRGs may be applicable for this particular parcel with the data in-hand, but the PDIWP was designed such that only parcels that exceeded the total PCB

FRG would be analyzed for D/F to calculate a total TEQ concentration. The co-location, or lack thereof, down to the residential FRG was not a goal of the PDIWP. Delineation samples should be collected and analyzed for all constituents of concern to ensure FRGs are achieved and receptors are protected.

Thanks,

**Daniel Peabody**

Environmental Quality Analyst

Remediation and Redevelopment Division

Michigan Department of Environment, Great Lakes, and Energy

**\*517-285-3924\* NEW PHONE NUMBER** | [PeabodyD@Michigan.gov](mailto:PeabodyD@Michigan.gov)

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**Kalamazoo River Superfund Site  
Area 1 Pre-Design Investigation Work Plan – Addendum 6  
Bin 1 and Bin 5 Discrete Sampling  
Prepared by Wood Environment & Infrastructure Inc.  
Dated Oct. 15, 2019**

**GENERAL COMMENTS**

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**Commenter:**

**General Comment #: 1**

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**Commenting Organization:** EGLE

**Commenter:**

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**Commenting Organization:** EGLE

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**Commenting Organization:** EGLE

**Commenter:**

**General Comment #: 4**

In addition to delineating polychlorinated biphenyl (PCB) contamination the Addendum will also need to include a second goal, which to vertically and horizontally delineate total TEQ contamination.

**Commenting Organization:** EGLE

**Commenter:**

**General Comment #5:** EGLE notes that a few locations in BIN 1 appear to have increasing PCB concentrations with depth that are approaching the FRG.

**SPECIFIC COMMENTS**

**Commenting Organization:** EGLE

**Commenter:**

**Section:** 2.1

**Page #:** 2-2

**Lines #:**

**Specific Comment #1:** EGLE notes that the residential FRG is applicable across depths including those greater than 1 foot and the statement on page 2-1 suggests the goal is to horizontally and vertically delineate concentrations above 2.5 mg/kg. The presence of soils at

depth and above the FRG may be addressed thru remedial action (e.g. excavation) or the use of institutional controls (e.g. land use restrictions), dependent on the wishes of the landowner.

**Commenting Organization:** EGLE

**Commenter:**

**Section:** 2.3

**Page #:** 2-2

**Lines #:**

**Specific Comment #2:** The Analytical Methods section suggests samples will be analyzed for total PCBs following the QAPP, but the QAPP has more than one analytical method to measure PCBs. The Addendum should clearly state which analysis is being used.

**Commenting Organization:** EGLE

**Commenter:**

**Section:** 2.5

**Page #:** 2-2

**Lines #:**

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**Commenter:**

**Section:** 2.5

**Page #:** 2-2

**Lines #:**

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**Commenting Organization:** EGLE

**Commenter:**

**Section:** 2.5

**Page #:** 2-2

**Lines #:**

**Specific Comment #5:** The oxbow and cut-off channel described between river mile 59.8 and 60.5 is certainly not unique to Operable Unit 5 (OU5), although EGLE is unsure if the precise hydraulic conditions modeled at this location and described in the text are present at other locations. If the CSM is that the river morphology and hydraulic conditions at this location resulted in higher PCB concentrations than other sections of Area 1, then the remainder of OU5 should be evaluated for similar morphologic and hydraulic conditions prior to future sampling events so that this hypothesis can be tested and the CSM can be updated, as necessary.